

VOLUME 28 • NUMBER 1 • JANUARY 2005

OCCUPATIONAL

# Health & Safety

MAGAZINE

ATVs  
Regulation & Training  
ARE CHANGING ATTITUDES

# Truckers

HAVE AN ENVIABLE SAFETY RECORD



by Kim Royal

**Note from the Managing Editor:** We heard from the Alberta Motor Transport Association about the cover of our September 2004 issue and about the drawing on page 12 that introduced the cover story on vehicle collision rates. Some readers perceived the images of transport trucks and "How is my driving? Call 1-800-SUB-PAR" to be offensive to professional drivers and the trucking industry.

The story acknowledges that the trucking industry has made great progress in safety programs. It also makes it clear that vehicle collisions are a serious concern in many other industries that do not employ professional drivers. Nevertheless, we know images can be powerful, and we did not intend to narrow the message only to the trucking industry. In this issue, Kim Royal, executive director of AMTA, offers an industry perspective on safe driving.



**T**he Alberta Motor Transport Association represents over 12,000 for-hire trucking companies in the province of Alberta. As an industry, we are proud of the men and women who have chosen to become professional drivers and the enviable safety record they have achieved.

We found the September 2004 issue with an article on Vehicle Collision Rates offensive because it gives readers the impression that commercial truckers are bad drivers. Even though the article talks about the overall incident rate, the impression the graphics portrays is that commercial drivers are the problem. The truth is just the opposite.

Alberta Transportation's website shows that the safest vehicle on the highway is a commercial vehicle in the Rocky Mountain Double configuration. This is a tractor pulling two trailers with a total length greater than 25 metres (maximum 38 metres). The next safest vehicle is also a Long Combination Vehicle – the Turnpike Double, which is also up to 38 metres long (or a tractor with two 53-foot trailers).

Alberta Transportation conducted a four-year study that reviewed every incident involving a Long Combination

Vehicle in Alberta. Not only was the incidence rate for Rocky Mountain Doubles lower than for any other vehicle on the road, but most of the incidents were not the fault of the truck driver. The Rocky Mountain Double had only one collision in an urban centre, and in this case the unit was sideswiped by a driver under the influence of alcohol. It is a testament to the skill of commercial drivers that the largest vehicles on the road are also the safest.

National statistics for all commercial vehicles are equally impressive. On Canada's highways commercial trucks are 15 per cent of the total traffic but are involved in only 3 per cent of the collisions. In those collisions, 80 per cent of the time the truck driver is not at fault.

One of our industry's biggest concerns on the road is the actions of other drivers. Trucks do not behave or handle like a passenger car, and a defensive driver acts accordingly. Since a large commercial vehicle may be pulling as much as 80,000 pounds, it requires a much greater distance to accelerate or stop. Quite often when a commercial truck driver approaches a red light, making sure there is adequate stopping distance, a car in an adjoining lane decides to switch lanes and moves in front of the truck. This action removes 10 or more metres of stopping distance for the truck. The trucker now must brake harder, and then unfortunately two more drivers may decide their vehicles can fit into the space as well. This eliminates any safety margin the truck driver had. It is only due to the skill of the operator that a collision is avoided.

Like all vehicles, large trucks have blind spots. A defensive driver avoids those areas for everyone's safety. As a guideline when traveling in a neighbouring lane or behind a truck, if you cannot see the driver's face in his mirrors he cannot see you. When pulling in front of a truck at highway speeds make sure you can see both of the truck's headlights in your rearview mirror before making a lane change. In urban situations, leave adequate stopping distance for the truck when making a lane change so as to allow for emergency stops.

If all drivers practice good road manners and treat fellow drivers with respect, we will lower the collision rate, not only for commercial trucks but for all vehicles.

*Kim Royal is the executive director of the Alberta Motor Transport Association.*

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Royalite operation around 1950.  
Note the lack of personal protective  
equipment a half century ago.  
Photo courtesy of the Provincial Archives of  
Alberta, H. Pollard Jr. collection, No. P3067.



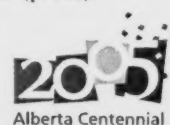
## Alberta's Centennial

**O**n September 1, 2005, Alberta will be 100 years old. To mark this centennial year, Albertans will take part in all sorts of celebratory activities. Many people will also have an opportunity to learn more about the exciting events that have taken place during the relatively short but nonetheless dramatic history of this province.

Without a doubt the discovery of oil at Leduc in 1947 is one of the major events of the past 100 years. The rise of the Alberta oilpatch in the 1950s saw hundreds of workers enthusiastically signing up for jobs in this dirty and dangerous business because it was also filled with adventure and offered a chance to earn good pay. Fifty years ago in the oil industry, people worked with little or no protective equipment, and safety training and regulation was minimal.

Here's how the situation is described in *Edmonton: In Our Own Words* by Linda Goyette (University of Alberta Press, 2004): "Everyone wanted to get in on the act," recalled Doug Gibbs, an Edmonton safety inspector, 'so you had inexperienced men working with very powerful machinery, often under high pressure, extreme weather conditions and at considerable heights.' Fifteen rig hands died on the job in Alberta in 1955 and severe injuries were common" (p. 318).

For more information about the  
plans to celebrate Alberta's  
centennial year, visit  
[www.albertacentennial.ca](http://www.albertacentennial.ca).



### CD Raises Awareness of Overhead Powerline Safety

Recently, a worker at a road-paving site received a shock when the box of a nearby dump truck touched an overhead powerline. The worker was transported to hospital by STARS air ambulance with undetermined injuries.

To help prevent incidents like this, which occur every year in Alberta, the Alberta Construction Safety Association has developed a resource to educate workers about the hazards of working near overhead powerlines. Called Overhead Powerline Contact Awareness, this CD presentation includes seven steps that apply when workers are near overhead powerlines. For example:

- Look Up and Live. Check for overhead powerlines before beginning work.

- Shuffle or Hop - Don't Step. When moving across areas that may present electrical hazards, either ensure that the heels do not pass the toes (shuffle) or keep both feet together and hop.

For more information, go to [www.acsa-safety.org/images/overhead.asp](http://www.acsa-safety.org/images/overhead.asp), where you can download the presentation. A CD ROM version is also available for \$10.70.

### Popular ACSA video nominated for award

The Alberta Construction Safety Association's 2003 Field Level Risk Assessment video, *See it Again for the First Time*, was nominated for an Alberta Motion Pictures Industry Association "Rosie" award and listed among the three finalists. For information about this resource, go to [www.acsa-safety.org](http://www.acsa-safety.org) or call 1-800-661-2272 (Edmonton) or 1-800-661-6090.



**NAOSH Week**  
**May 1-7, 2005**

It's time to start planning your events and activities to celebrate North American Occupational Safety & Health Week, May 1-7. The theme for 2005 is "Equip. Educate. Empower."

This annual event focuses the attention of employers, employees and the general public on the importance of preventing injury and illness in the workplace and encouraging new health and safety activities.

The National Launch will take place in Yellowknife this year.

For details, go to [www.naosh.ca](http://www.naosh.ca).



### Hundreds Attend Annual Health & Safety Conference

The 3rd annual Alberta Health and Safety Conference and Trade Fair, held in Edmonton at the Shaw Conference Centre November 8-10, attracted over 400 delegates and more than 100 trade fair exhibitors. If you add in all the speakers and volunteers, the total number of safety-oriented people gathered at this event came to about 720. Organized by the Health & Safety Conference Society of Alberta around the theme of "Building Partnerships," this event provided something for everything.

These are just three of the topics covered in the 42 sessions that were available to choose from.

**SAFETY CULTURE** Employees' perceptions can play a powerful role in creating a safe (or unsafe) environment. Presenter Dennis Ryan of Compass Health & Safety brought his point home with a story about five monkeys who refuse to climb a set of stairs to get a banana, even though none of them knows why they shouldn't. It's just "the way we do things around here."

**VIOLENCE IN THE WORKPLACE** presented by Abrantis. Having workers assaulted and/or threatened is bad enough, but the effects of violence at work go far beyond the suffering of the victim. There are steps an employer can take to help prevent the occurrence of a violent incident. It is also important to establish procedures for reacting if or when a violent incident occurs.

**APPLIED RESEARCH** Troy Jones, PhD, a University of Alberta researcher in ergonomics, helped the Alberta Forest Products Association to identify the most typical musculoskeletal injuries in the industry. It was originally thought that backs were the biggest concern but a survey indicated that most injuries were actually in the upper body (forearms and shoulders).

Start planning now to attend the 4th annual conference and trade fair next year in Calgary. The dates are already set: **November 7-9, 2005.**

For more information, go to [www.hsconference.com](http://www.hsconference.com).



# Fall Protection

AN ALBERTA COMPANY DISCOVERS THE  
BENEFITS OF POLICIES AND EQUIPMENT



by Allan Sheppard

**M**ichael Cowan has good reason to appreciate the value of fall protection equipment: "I wouldn't be here without it," he says simply and sincerely.

Michael is living proof of the life-saving benefits of fall protection. More than that, Michael is living proof of the need for employers to have and enforce a fall protection policy – and of the benefits of working cooperatively with occupational health and safety officers to correct deficiencies when they are identified.

Michael joined MIT Contracting in March 2004 and went to work as a framer on a project in southeast Edmonton. His job orientation included a training session on the proper use of fall protection equipment as provided by the company. He was also advised of the company's mandatory fall protection policy, which specifies fall protection equipment must be used as required by the section 9.139 (1) and (2) of the Occupational Health and Safety

Code. Specifically, fall protection is necessary when "the worker may fall three metres or more," or when "there is an unusual possibility of injury if a worker falls less than three metres." If, for example, a possible "injury may be worse than an injury from landing on a solid, flat surface."

In mid-July 2004, Michael was working on the roof of a frame condominium unit. He describes what happened: "I was nailing down the sheeting on the roof, and it was wet, so it was a little slippery. We were down near the edge of the building, and basically I had turned around to go back up to the peak of the building and slipped on some sawdust and slid

off the edge of the building." Instead of falling five storeys to the ground, he was saved by his standard safety harness and lanyard and rescued by his co-workers.

Had Michael started working for MIT Contracting a year earlier, the story might have been sadly different. "Before the safety equipment was enforced," says foreman and two-year MIT employee Ryan Rezansoff, "we still had safety harness and whatnot that we used in certain situations on a roof." But there was no policy, and workers were allowed to make their own decisions about when to use fall protection. "Now that it's been enforced, they're used a lot more

**Michael says he will always use fall protection equipment when it is required. Would he insist on having it, if it were not supplied?**  
"Yes. Knowing what I know now."

## DO YOU KNOW HOW TO USE YOUR FALL PROTECTION EQUIPMENT?

**A** fall protection system, properly used and maintained by a trained worker, is indispensable when working above three metres. But you cannot take your equipment and training for granted, says Ted Lane, a lead investigator with Workplace Health & Safety. Lane recalls an incident where a worker fell even though he was properly equipped and trained, and supported by a fall protection policy.

Lane describes the circumstances: "The site was the construction of a large bridge. The worker was young, just 18, and he was working at a height of almost eight metres. The company had a fall protection policy in place. They had provided everybody with harnesses and lanyards. They were double lanyards, so that the workers could clip off at one point, walk along, and clip off at another point before they released the first clip, so that they were continuously protected. Along a walkway, they were using vertical rebar (reinforcing rod) that was part of the bridge construction to clip onto."



Worker using an approved adjustable travel restraint line.

often. They make us wear them now, whether you want to or not."

Michael happily endorses that policy. He says he will always use fall protection equipment when it is required. Would he insist on having it, if it were not supplied? "Yes. Knowing what I know now."

There is an earlier chapter in the happy story of Michael Cowan. Shortly before Michael went to work for MIT, Karl Pedersen, an Alberta government occupational health and safety officer, went to an MIT work site in northeast Edmonton in response to information received from a member of the public. "I found a group of workers framing the roof and sheeting the roof with no fall protection, and a potential fall of about five storeys. I stopped the work. I found other problems so I stopped the work on the entire site until the problems were fixed."

The important thing, says Pedersen, is not how many stop orders he wrote against the job, but how MIT Contracting

The rebar was strong enough to provide a secure anchor point. The safety gear complied with CSA standards. Yet the keeper (safety latch) opened under stress, and the worker fell. Subsequent investigation showed that the rebar was placed so closely together that it interfered with the free movement of the snap hook and occasionally kept the hook from seating properly against a bar, preventing the keeper from closing fully. When the worker slipped and put his full weight on the hook, it opened and fell away from the rebar. The worker was fortunate to survive the fall with only minor injuries.

Workers may clip and move their snaps hooks "several times a minute," says Lane, so it would have been difficult to make sure the hook was properly seated before moving every time. But if unencumbered anchor points are not available, staying alert and aware of possible dangers is the only way to keep safe.

The Alberta Construction Safety Association has issued a set of guidelines to help workers minimize the risks associated with the use of fall protection equipment. Here is a partial list of the ACSA's precautions for individual workers:

- Be fully conversant with the protection system.
- Know the capabilities of fall protection equipment.
- Know your anchor points.
- Do not wrap the lanyards and/or rope around beams, girders, pipes, etc.
- Utilize a buddy system. Continually check each other's harness and D ring to ensure the harness is not too loose and or the D ring has not slipped down the back.

*The guidelines are available in full at [www.acsa-safety.org/safeworddocs/SWP00030.doc](http://www.acsa-safety.org/safeworddocs/SWP00030.doc).*

*continued on page 8*



responded to his intervention. "The response was positive right from the beginning. I had the owner's ear. I went over to his office. They hired a safety

consultant. They took the training. They trained the whole crew. I have the records of that."

The result: a safety-conscious working environment in which workers are equipped and trained to work safely at heights. That, says Pedersen, is the result of a positive working relationship between him and the contractor. "If you take the advice of the provincial government and follow the legislation, it does pay dividends."

Dividend No. 1 for MIT Contracting is a healthy young worker named Michael Cowan, still productive and learning on the job.

*Allan Sheppard is as freelance writer and researcher who lives in Edmonton.*



**Are you  
a Health  
and Safety  
Innovator?**



[worksafely.org](http://worksafely.org) 1-866-415-8690 (toll free)

**Alberta**

## Call for Applications

### Annual Awards for Innovation in Workplace Health and Safety

Be recognized for your efforts in creating a safer and healthier work environment. Individuals, organizations and companies are eligible to enter health and safety innovations implemented during the 2004 calendar year.

**Be recognized as one of Alberta's  
outstanding health and safety  
innovators. Apply today.**

Entry deadline is February 15, 2005.

For more information on the awards and to download an application package visit [worksafely.org](http://worksafely.org)

## Resources

### WEB LINKS

[www.gov.ab.ca/hre/whs/publications/pdf/al014.pdf](http://www.gov.ab.ca/hre/whs/publications/pdf/al014.pdf)  
Safety Bulletin on proper use and selection of anchors

<http://construction.healthandsafetycentre.org/s/Prevention-GeneralConstruction.asp?ReportID=23916>

Worksafe BC links, fall arrest procedures and incidents

[www.ohscanada.com/SafetyPurchasing/FallArrest.asp](http://www.ohscanada.com/SafetyPurchasing/FallArrest.asp)  
Proper use of fall arrest equipment

### IN THE ALBERTA GOVERNMENT LIBRARY - LABOUR BUILDING

For contact information, see page 18.

#### Videos

#### Fall Protection Ladder Safety

Training for employees on the use, inspection and maintenance of portable and fixed ladders commonly used in the industrial workplace. (VC 0400)

#### Falls in the Workplace

Topics covered: categories of falls, falls from heights, the five components of the Hierarchy of Controls and range of control measures that can be used to prevent falls in the workplace. (VC 0347)

#### High Impact Fall Prevention

Graphic re-creations of 10 incidents remind us about shortcuts and other common safety mistakes that can lead to death or injury. (VC 0322)

## GETTING WORKPLACE HEALTH ON THE AGENDA

Dr. Graham Lowe of the Graham Lowe Group Inc. has identified three steps to take to get workplace health on the executive team's agenda.

- ① Take every opportunity to link employee health and safety to the organization's performance and its business strategy.
- ② Expand the scope of individual attitudes and behaviours beyond the realm of health to include productivity.
- ③ Start thinking of healthy work environments as the enabling context for learning and innovation.

Source: At Work: Information on workplace research from the Institute for Work & Health, Issue 38, Fall 2004.



# THE TOUGHEST JOBS for your back



by Ray Cislo

Up to 80 per cent of adults will experience back pain at some point in their lives. But which jobs are the most likely to involve back injury?

Selected members of the American Chiropractic Association were recently asked which jobs they considered to be the most "backbreaking." At the top of the list were the drivers of heavy trucks and tractor-trailers. The prolonged sitting and constant vibration they are exposed to can damage the spine. Increased body weight, often the result of a less-than-optimal diet on the road, can also contribute to back problems.

The other nine jobs, in no specific order, included:

- Construction work. The awkward body positions required when hammering, lifting or doing steelwork or ironwork can injure the back.
- Landscaping. Injuries are often associated with lifting heavy loads of dirt, rocks, peat moss, etc. and wheeling an unsteady wheel barrow.
- Emergency personnel. Police officers can spend long periods of time sitting in their cars, often wearing heavy equipment belts. They can also twist or strain their backs while struggling with someone during an arrest. Firefighters and EMTs may have to carry victims to safety and maneuver heavy hoses that deliver water under high pressure.
- Roof shinglers often kneel or have their body in an awkward position.
- Delivery drivers are always on the go, often carrying heavy and awkward packages. The prolonged periods of driving are also hard on the back.
- Nursing home workers. The awkward body positions and significant forces required to lift, lower and move elderly people are significant hazards. Patients sometimes make unexpected movements that cause the worker to sustain an injury.

- Auto mechanics assume awkward body positions all day long that contribute to back and neck problems.
- Farmers. Lifting heavy equipment and supplies, and constantly looking backwards when doing fieldwork, contribute to back injuries.

In 2003, Alberta workers in the following 10 jobs had the highest number of reported back injuries (listed in order from most to least):

- 1 truck drivers
- 2 labourers
- 3 nurses
- 4 janitors/cleaners
- 5 freight handlers/stevedores
- 6 sales clerks
- 7 carpenters and workers in related occupations
- 8 material handling labourers
- 9 welders/flame cutters
- 10 personal service occupations

Source: Lost-time claim data, Workers' Compensation Board-Alberta

Why the differences in these two lists? A lost time claim is a work-related injury that results in the worker missing at least one day of work. The injury must also be reported to the WCB. Many back injuries go unreported. The worker may take a couple of days off, take on other less demanding duties or simply become one of the walking wounded, waiting for the injury to heal and the pain to go away.

The injured worker may go to a doctor or chiropractor for treatment but leave his or her injury unreported. Although the workers are not included in the WCB statistics, their injuries are captured in a survey of chiropractors.

Ray Cislo, P.Eng., B.Sc.(H.K.) is a safety engineering specialist at Workplace Policy and Standards, Alberta Human Resources and Employment.

## Resources

### WEB LINKS

- [www.gov.ab.ca/hre/whs/publications/pdf/bcl004.pdf](http://www.gov.ab.ca/hre/whs/publications/pdf/bcl004.pdf)  
Lifting and Your Back - Some Fresh Ideas
- [www.gov.ab.ca/hre/whs/publications/pdf/bcl005.pdf](http://www.gov.ab.ca/hre/whs/publications/pdf/bcl005.pdf)  
Seven Myths about Back Pain
- [www.gov.ab.ca/hre/whs/publications/pdf/ph003.pdf](http://www.gov.ab.ca/hre/whs/publications/pdf/ph003.pdf)  
Let's Back Up a Bit - Some Truths About Back Belts

# Reinvesting



by Cheryl Mahaffy

**S**ay your company receives a \$200,000 insurance rebate for significantly improving its incident rating. How should those dollars be used?

## Halliburton Canada

Facing that happy question, Halliburton Canada, an international oilfield services company, is reinvesting its savings right back where they came from: into initiatives aimed at improving safety. Combining its PIR rebate (see sidebar) with another \$250,000 saved by having an incident rate 20 per cent below industry average, Halliburton is mounting a three-day health, safety and environmental training session for 350 supervisors, taught by such company leaders as David Ackert, regional vice president, Terra Nicolay, region counsel, and Theriau, health and safety manager. Nor is this the first such use of the rebate, which last year funded the MOOSE (Managing Our Observations

Seeking Excellence) behavioural safety and performance training program for 260 frontline workers.

"The senior managers are all committed to safety as a value and not a priority," Theriau says. "We want to ensure those at the frontline have as much commitment, knowledge and as many tools as we have, and really to continue to develop their skills and capabilities, so there's not a weak link in the chain."

Halliburton's lost time incident record, for example, has dropped from a spike of 2.52 lost time injuries per 200,000 hours worked in 2000 to a year-to-date rate of 0.22 for 2004.

Strategic use of the PIR rebate is one key to that progress, Theriau says. "We use it as in investment, and investments pay returns. Every time you don't have an incident, you have more time for productivity – and more time to do proactive things to continuously drive the zero injury culture."

## ABOUT THE PIR PROGRAM

The companies featured in this article are just four of the 7,183 Alberta employers who've signed onto the Partners in Injury Reduction program, which rewards safety improvements by rebating as much as 20 per cent of Workers' Compensation Board premiums. In 2003 more than half of those partners earned rebates, which totalled \$47.3 million.

As a group, PIR participants make 13.5 per cent fewer (and 27 per cent less costly) lost-time claims than non-PIR firms. What's more, many have seen a healthy trend toward improvement since joining PIR.

## H&R Transport

H&R Transport in Lethbridge is investing part of its \$150,000 rebate for 2003 in quarterly bonuses for incident-free drivers. "We used to give away trinkets, to put it bluntly, but they didn't seem to work as well," says Stephen Evans, vice president for loss control and regulatory compliance. "Now we pay drivers up to \$350 each quarter if they have no incidents, no claims, no safety violations. There seems to be a stronger incentive when it's money rather than a jacket or belt buckle. Also, it's every quarter so it's more immediate. So there's a far stronger connection between performance and rewards."

The bonuses are part of a safety redesign implemented about a year ago after reviewing benchmarks in the industry, Evans says. As part of that same redesign, the temperature-controlled trucking firm is using rebate dollars to fund two new positions. A safety coordinator now consults with employees involved in all incidents (not only the headline grabbers), stressing accountability and addressing root



# SAFETY REBATES

causes. A full-time Workers' Compensation Board coordinator works with every injured employee to explore preventive measures and facilitate the move back into the workforce.

"There's no magic bullet," Evans says. Yet he feels strongly that strategic rebate reinvestment under the new safety plan deserves significant credit for a positive trend in both incident rates and WCB claims. Nearly five decades old, H&R was wise to revamp, renew and re-energize its approach to safety, he adds. "Everyone gets into a rut after several years of doing things the same way day in and day out. We had to stop, look around and find out there was another way of encouraging, recognizing and rewarding safe behaviour."

**Shepherd's Care Foundation**  
When Shepherd's Care Foundation in Edmonton received its first sizeable rebate for safety improvements in 2002, President John Pray set the tone by saying, "Reinvest it in the staff."

Each department chimed in with a wish list, and by carefully stewarding the \$18,000 rebate the health and

safety committee made all those wishes come true. "It was a wise investment," says Kay Willekes, director of operations and human resources. "We've seen a lot of benefits, including a significant drop in injuries."

Serving hundreds of senior residents in units ranging from continuing care to independent condos, Shepherd's Care workers are especially prone to back injuries due to bending and lifting, Willekes says. Many of the safety purchases reflect that fact. Nursing staff received transfer belts to support the weight of residents being moved, for example. Laundry staff gained platforms that enable them to reach the bottom of a basket without bending as far. Other purchases range from ladders to first aid training to protective sleeves that reduce kitchen burns.

Health and safety has become a significant priority since Pray became president in 2000, and statistics reflect his visionary approach, Willekes says. Rebates vary, with last year's dipping to \$5,000, but the trend is positive. Departments such as laundry and housekeeping have not seen any injuries since receiving the new safety devices.

Unlike some organizations that invest in a few large items, Willekes adds, "We went the route of a variety of things, those most needed as identified by staff. To me, if you empower staff, you're going to get a lot more mileage."

## Canfor

A left-hand turn lane. Not the first purchase you'd expect with corporate safety dollars. But it made sense for

Canfor, whose Grande Prairie workers were enduring raised hackles and incidents as they entered the company's sawmill/planer mill complex along increasingly busy Highway 40. Having some funds left in its PIR rebate pot, Canfor entered into a joint venture with the City of Grande Prairie to install a turning lane coupled with an advance signal during shift changes and lunch hours. Since then, no further incidents have happened at the turn.

"We try to hold some of our rebate in a safety fund, knowing something will come up in the middle of next year that's not in the plan and not in the budget," says Pat Donnelly, Grande Prairie plant manager. "It allows us to have a little bit more flexibility."

Rebate investments are chosen by a joint plant safety committee involving both union and management from all areas of the mill. With a \$90,000 rebate for last year, the committee is pondering a behavioural safety program called Safe Start, which prompts workers to explore what causes incidents and how to prevent them. Previous years' rebates helped maintain and upgrade a gymnasium that is well used by both workers and their families.

"We tend to try to use our rebate dollars to fund things we might not necessarily do otherwise," Donnelly says. "Safety is about a culture and about an environment. When we have a little bit of extra money, we want to spend it to enhance that culture and environment."

With about half as many reportable incidents as the industry average, Donnelly adds, "We operate on the premise that all individual incidents are preventable, and we're working very hard to make sure that happens."

*Cheryl Mahaffy, an Edmonton writer, is co-author of Agora Borealis: Engaging in Sustainable Architecture.*

## Resources

### WEB LINKS

[www.wcb.ab.ca/news/2004/040519bkg.asp](http://www.wcb.ab.ca/news/2004/040519bkg.asp)  
Background on the 2003 PIR program

[www.wcb.ab.ca/news/2004/040519.asp](http://www.wcb.ab.ca/news/2004/040519.asp)  
May 2004 WCB Alberta press release about rebates

# ATVs

## Regulation & Training

ARE CHANGING ATTITUDES

by Norma Ramage

Twenty years ago, all-terrain vehicles were primarily bought for recreational use. Today, they're the transportation workhorse at many Alberta work sites. Oil and gas employees hop aboard them to check out pipelines and foresters take them into deep woods. Emergency medical technicians, adventure travel companies, seismic and survey crews, ranchers and police all use ATVs because they're cheaper and more versatile than four-wheel drive trucks.

Until last April, however, no part of the provincial government's occupational health and safety rules dealt specifically with ATVs – although they were essentially covered by a long-standing general provision in the General Safety Regulation requiring that machinery be used in accordance with manufacturer's specifications.

### Regulation

The decision to include ATVs by name in the Occupational Health and Safety Code (Part 19, s. 280) reflects their increasing prevalence at provincial work sites, says Kenn Hample, senior engineer, Legislation and Policy Development, Alberta Human Resources and Employment. "One of the

reasons they weren't specifically mentioned before is that the previous rules were 20 years old in some cases. ATVs on a job site were pretty rare back then," Hample says.

In addition to provisions in the Code, the Occupational Health and Safety Regulation requires that employers ensure workers are trained in the safe operation of any equipment they are required to use, adds Hample. The Code has several general provisions describing things like operator responsibilities, safety equipment, and inspection and maintenance, along with four specific provisions:

- The use of three-wheeled ATVs is prohibited. (These have not been manufactured since 1987 because of their instability.)
- Operators' manuals must be in place on the vehicle or at the work site.
- If an ATV is used to move a load, that load must conform to the limits in the manufacturer's specifications.
- If the manufacturer has not established limits for use of the vehicle on sloping ground, employers must develop their own set of instructions.

Safety and training consultant George Billings says the provincial government has "taken the lead" in ATV safety by specifying the vehicles in its revised Code. "This highlights for employers and users that there are requirements for the safe operation of these vehicles."

### Training

Billings, who has driven ATVs for more than a decade, says he is constantly amazed at the casual attitude of the vast majority of people toward these powerful machines, which can weigh up to 650 pounds and travel at speeds as high as

**Whether participants are experienced ATV riders or novices, the course takes them back to the basics.**



80 kilometres per hour. "We have to educate people in the safe operation of these vehicles. You wouldn't let someone drive a car without training, so why let them drive an ATV?"

Training is exactly what Billings provides as chief instructor for the Alberta Safety Council's ATV courses for instructors and riders. The Alberta Safety Council offers public courses in Edmonton and Calgary, plus customized courses for companies and groups in Alberta and B.C. The one-day rider course, which costs \$160 for Safety Council members and \$170 for non-members, covers safe riding practices and strategies, pre-ride inspections, traversing, protective equipment, turns, loading and transporting. The five-day instructor course, which is \$1,100 for members and \$1,230 for non-members, includes all of the basics in 21 learning modules, plus actual hands-on teaching experience with a class of eight beginning riders. To successfully complete the course, would-be instructors have to pass both a skills test and a written knowledge test.

Graduates of the instructor's course can go back and train fellow employees, says Billings. "We encourage companies to send people to this course. If they train one of their own staff as a certified

instructor, that person can then train other employees in-house. It's cheaper and more convenient for the companies, especially if there is a large turnover of employees."

Trevor Whiting, owner of an oilfield services company in Edson, is a recent graduate of the course. Although a veteran ATV user, Whiting says the Alberta Safety Council course is "excellent" and taught him things he didn't know. Now he plans on offering training to the contractors he hires in his business. "The big oil and gas companies I work with don't want untrained people on their sites, and I don't want my contractors working for me without training."

**Alberta Safety Council courses** Billings says the basic goal of the Safety Council courses is to "provide people with responsible, prudent viewpoints on the safe use of ATVs." So whether participants are experienced ATV riders or novices, the course takes them back to the basics.

Billings starts with proper equipment, which includes a Department of

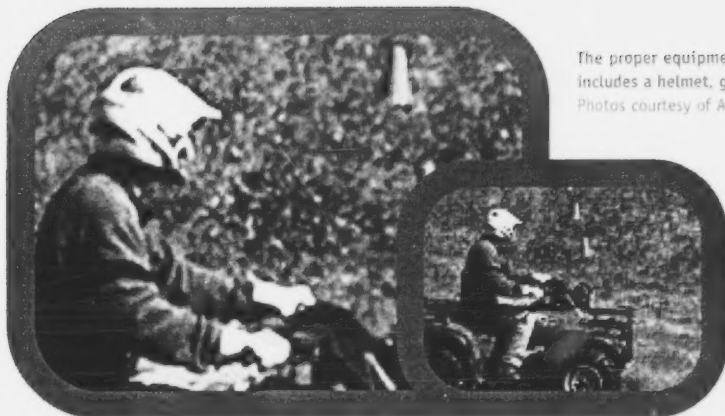
Participants in Alberta Safety Council ATV courses learn that their vehicle is neither a toy nor a car. Photo courtesy of Alberta Safety Council.

Transport-approved helmet, shatterproof goggles, leather gloves, boots that cover the ankle, sturdy pants and a jacket. "After all," he says, "you wouldn't ride a motorcycle without a helmet or in sneakers and shorts, and you shouldn't ride an ATV that way either."

One of the most valuable things Billings teaches his students is that they can't treat an ATV like either a toy or a car. It has four wheels like a car, but it also has handlebars for steering control like a bicycle or motorcycle, explains Billings. Like a motorcycle or bicycle, it requires drivers to constantly shift weight for control. "It's a very rider reactive vehicle. I've had people come back from their first training run aching in muscles they didn't know they had."

Billings teaches students how to shift their weight to go uphill, downhill,





The proper equipment for ATV riders includes a helmet, goggles, gloves and boots. Photos courtesy of Alberta Safety Council.

across slopes and around corners. He also teaches them methods of assessing unfamiliar terrain and reacting quickly in an unexpected or emergency situation. For example, ATVs have foot pedals like a car that activate only the rear brakes and handlebar levers, similar to those on a bicycle that operate both front and back brakes. In an emergency an untrained rider might instinctively slam his foot on the pedal as he would in a car. But with an ATV, there are certain times when that can throw you off the machine.

"They really are different from a car," Billings says. "You can't safely take them on a paved road. Car tires have 30 to 40 pounds of pressure, while ATV tires have three to five pounds. If you make a sharp turn on pavement with those soft tires, they could come right off the rim."

### Preventing ATV incidents

Verleen Barry is a provincial government lead investigator and occupational health and safety officer who typically investigates one or two ATV incidents every year. She says many of the problems she sees are caused because people aren't wearing the right safety equipment. "In a lot of ATV incidents, people get thrown off the machine and land on their heads, and they aren't wearing helmets. The Code now requires proper safety equipment, including a helmet, so I look for that when I go out to a job site." Barry says other common problems are excessive speed and unfamiliarity with the terrain.

Barry says many incidents could be avoided if employers and employees read and adhered to the manufacturer's operations manual provided with every ATV. She says these comprehensive manuals include information on safety equipment, loading, pre-trip and post-trip inspections, riding on sloping ground and maintenance, as well as other instructions for safe riding.

Tracy Arbuckle is vice-president of a group of ATV users in the Crowsnest Pass called the Quad Squad and a graduate of the Alberta Safety Council instructor course. He agrees that many people don't realize how demanding it can be to ride an ATV in Alberta's rugged back country. "If you're a company with a dozen quads – and I work with some companies that use as many as 25 or 30 of them – that represents a big capital investment," Arbuckle says. "If you throw somebody who is untrained on them and they get injured and the machine gets wrecked, it doesn't make any kind of sense."

*Norma Ramage is a freelance writer and communications consultant living in Calgary.*

### Resources

#### WEB LINKS

[www.safetycouncil.ab.ca/](http://www.safetycouncil.ab.ca/)  
Alberta Safety Council (Choose "Programs/Training" and then "All Terrain Vehicle -Instructor's Course.")

[www.safety-council.org/info/sport/atv.html](http://www.safety-council.org/info/sport/atv.html)  
Canada Safety Council information on ATV safety

[www.saferoads.com/pdf/ATVBrochure.pdf](http://www.saferoads.com/pdf/ATVBrochure.pdf)  
Alberta Transportation ATV safety brochure

### Reporting on RECENT CONVICTIONS

under the Occupational Health and Safety Act

#### EMPLOYER/PRIME CONTRACTOR

Trican Well Service Ltd.

#### INCIDENT

On November 5, 2001 a worker was fatally injured when an explosion occurred in the piping system on a coil tubing unit and the failed components struck the worker.

#### VIOLATION

Trican Well Service Ltd. was found guilty of three charges under the Occupational Health and Safety Act: failing to ensure workers are aware of the hazard information on a controlled product, failing to obtain a Material Safety Data Sheet (MSDS) and failing to ensure an MSDS is available to workers for a controlled product.

#### FINES

Trican Well Service Ltd. was fined \$120,000 plus an \$18,000 victim surcharge.

#### EMPLOYER

Jirah Construction Services Ltd. and  
W.S. Building Products Ltd.

#### INCIDENT

On July 24, 2002, a knuckle boom crane operator employed by W.S. Building Products Ltd. was placing a bundle of OSB sheathing weighing 910 kilograms onto the roof trusses of a single-storey residential house under construction. Two Jirah Construction Services Ltd. framers were on the roof trusses, guiding the operator. The load slipped off the forks of the crane and fell onto several trusses, collapsing them. One framer was fatally injured after falling 3.35 metres to the concrete floor below.

#### VIOLATION

Jirah Construction Services Ltd. was found guilty of failing to ensure the health and safety of a worker [s. 2(1)(a)(i), Occupational Health and Safety Act]. W.S. Building Products Ltd. pleaded guilty of not ensuring that work was being performed by a competent worker [s. 14(2), General Safety Regulation].

#### FINES

Jirah Construction Services was fined \$5,000 plus a \$10,000 victim surcharge, and was required to donate \$85,000 to the Alberta Construction Safety Association or a comparable recognized or accredited construction safety association. W.S. Building Products was fined \$5,000, and was ordered to allocate an additional \$45,000 to community charitable foundations.

For more information, go to [www.whs.gov.ab.ca/prosecutions/releases.asp](http://www.whs.gov.ab.ca/prosecutions/releases.asp).



From the Courtroom

by Tamara Trull

### Forensic Accounting Reports

At a spring trial in Red Deer, Jirah Construction Services Ltd. was found guilty of failing to ensure the health and safety of a worker (see details in "The Last Resort," column opposite). However, after the finding of guilt, the directing mind of Jirah Construction Services Ltd. informed the court that the corporation had been dissolved and that he was now conducting business under a new corporate name, Rocky Mountain Custom Homes Ltd. At the request of the Crown Prosecutor, the court ordered the production of extensive financial records dating back five years for both Jirah Construction Services Ltd. and Rocky Mountain Custom Homes Ltd.

Alberta Justice retained an expert forensic accountant to review the financial information and comment on the inter-relationship of these two entities. The report concluded that Rocky Mountain Custom Homes Ltd. appeared to be an alter ego of Jirah Construction Services Ltd.

When imposing the sentence, the court emphasized that if Jirah Construction Services Ltd. does not pay the fine, the successor corporation will be pursued to make payment.

*To suggest topics for future columns, please send a message to [Tamara.Trull@gov.ab.ca](mailto:Tamara.Trull@gov.ab.ca) or [Brian.Caruk@gov.ab.ca](mailto:Brian.Caruk@gov.ab.ca).*

*Tamara Trull is a Crown Prosecutor in the Occupational Health and Safety Prosecution Unit of Alberta Justice.*



# Keeping young workers SAFE

by Alf Cryderman

**Y**oung workers bring a lot to the job site: enthusiasm, strength, energy and a desire to do well. But, whether it's cooking fries at a fast food restaurant or being a welder's helper on the floor of an oilfield supply company, they also bring inexperience. They are often not aware of the risks of their jobs or how they can protect themselves.

Combine that inexperience with a young person's tendency to feel invulnerable, that nothing can happen to them, and the result is some grim statistics. Young workers between 15 and 24 are one-third more likely to be injured on the job than those over 25, and over 50 per cent of those injuries occur during the first six months on the job.

Several groups and individuals in Central Alberta are doing something about this important issue. They are developing and delivering safety programs for youth, often by working together.

## Youth Employment Development Centre

The Youth Employment Development Centre has provided employment support services in Red Deer for 20 years. A project of the Red Deer Chamber of Commerce, this agency offers job safety training through a partnership with St. John Ambulance and other agencies.

"It's all about awareness," says Donna May, administrator of the centre. "Young people often don't know the dangers of a job and they especially don't know that they have the right to ask the boss questions, to ask for safety training or

– and this can be critical – that they have the right to refuse to work in dangerous conditions. An injury, even a small one, can change the direction of their lives."

The Youth Employment Development Centre offers free safety courses to young people who no longer attend school. They provide Job Safety Skills, WHMIS and Standard First Aid courses. Since 2002, 483 young people took the basic three-day safety course there, with most going into jobs in construction and the oil patch. As well, there are courses in Petroleum Safety Training and Construction Safety Training. Employers can send their young employees to these programs too. (For a full list of the courses available, go to <http://ux.yedc.org/index.htm>.)

**"The more we can educate young people and teach them that it is okay, even cool, to be safe, the better it will be."**

## Central Alberta Career Prep

Central Alberta Career Prep aims its message about safe working conditions at high school students. It links career development information to various courses to prepare them for work or for post-secondary training – and safety training is an increasing part of their programs. Through the Tech Prep

Credential, high school students take courses in personal safety (CTR 1210) and Standard First Aid with CPR (CMH 2120).

Recently, Career Prep added a fun, yet informative, Safety@work interactive virtual reality program to their website, [www.careerprep.ab.ca](http://www.careerprep.ab.ca). Funded by Alberta Human Resources and Employment, Safety@work takes dead aim at workplace hazards. Hazards are found even in relatively safe

# in Central Alberta

workplaces like offices, where bookcases can topple, and fast food restaurants, where workers can suffer serious burns.

Executive director Patti Henley says, "Young people tempt fate more than older workers. We're dedicated to making them aware. We try to get them talking about safety, and we want to take safety training from an event to a continuing process."

## The Safe Communities

**Coalition of Central Alberta**  
Launched in September 2003, the Safe Communities Coalition of Central Alberta wants to prevent injuries to everyone, but they place an emphasis on the young. This group is an affiliate of a national injury prevention organization called the Safe Communities Foundation ([www.safecommunities.ca](http://www.safecommunities.ca)), which was started in Ontario by a man whose 19-year-old son was killed on his third day on the job. The coalition sponsors Red Deer's Youth Employment Development Centre/St. John Ambulance program for out-of-school young people between 16 and 24.

"Injuries are preventable," says Theresa Huber, the coalition's coordinator. "This especially applies to young people, who are over-represented in accident statistics because of inexperience and lack of training. We know that safety training and awareness can make a huge difference. But there's still a long way to go. Many young people start jobs without any training, because it's not available."

## Job Safety Skills Society

The Job Safety Skills Society ([www.jobsafetyskills.com](http://www.jobsafetyskills.com)), a province-wide non-profit organization started in 1991, is also active in central Alberta. In a partnership with educators, industry, government and local communities, it seeks to address the unacceptably high number of workplace injuries and fatalities among young workers.

The society's executive director, Dr. Michael Alpern, says, "For many years youth injuries and fatalities were looked upon as a relatively minor problem because young people are seen as just passing through, as

transient to the work force. Since 1997 our safety courses have been approved as options by Alberta Learning. It's our hope Alberta Learning will consider making them a graduation requirement for all students."

## Other activities in schools

Dan McLellan, in Blackfalds, just north of Red Deer, is the safety supervisor for the NWP Group of Companies. He's achieved a certain level of fame in the local safety community for his no-nonsense presentations to students about job safety. He starts by bringing in a body bag – a real attention-getter for the students.

"It's quite the little prop, and it works because I tell it like it is," says McLellan. "My message is that you can end up in a body bag. The statistics are there to back me up. There are too many victims. I've had to talk to parents and families after incidents, and it is very difficult. How do you console a family when someone is hurt on the job? An incident affects other people besides the victim – the family, friends and (often overlooked) co-workers."

"My biggest frustration is that while there are some excellent job safety programs, not all schools offer them," McLellan says. A lot of schools say they can't fit them in. Or if the teachers are willing, it's the school boards that need to get behind safety programs. Teaching safety in the schools can make a big difference."

Getting a safety message to students is part of Kathy Harrington's job as off-campus education coordinator at the Innisfail Junior/Senior High School.

just south of Red Deer. While job safety courses are optional at her school, most senior students take them. "The more we can educate young people and teach them that it is okay, even cool, to be safe, the better it will be. But it's going to take time for the effects to filter through. A lot depends on employers recognizing the importance and value of establishing and sustaining a safety culture in the workplace."

Until more employers make safety integral to their operations, until more schools provide and promote safety programs, and until more kids realize how dangerous working can be, the statistics on youth workplace injuries aren't likely to change much. But it's good to know that in central Alberta excellent people and organizations are working hard to make that happen.

*Alf Cryderman is a freelance writer and editor based in Red Deer.*

## Resources

### WEB LINKS

[www.passporttosafety.com/youth/default.php](http://www.passporttosafety.com/youth/default.php)  
Passport to Safety – cool Canadian website for young workers

[www.gov.ab.ca/hre/whs/workers/index.asp](http://www.gov.ab.ca/hre/whs/workers/index.asp)  
Alberta information for young workers

<http://youngworker.healthandsafetycentre.org/s/Home.asp>  
Worksafe BC information for young workers

### IN THE ALBERTA GOVERNMENT LIBRARY – LABOUR BUILDING

*For contact information, see column opposite.*

#### Videos

##### Lost Youth: Four Stories of Injured Young Workers

Re-creations of incidents and emotional interviews with the young people and their parents bring home the message that parents, employers, workers and the community all need to help teach young people how to be safe on the job. (VC 0365)

##### Dying To Work

Following David Ellis' father as he campaigns for tougher safety rules and tries to make teenagers aware of the risks on the job, W-Five reporter Wei Chen discovers an astounding statistic: on average, one young worker in Canada dies on the job each week, and 60,000 young workers are injured each year. (VC 0345)

##### Safety First

In 1994, seven young workers died in Ontario workplaces. The IAPA and the Workers Health and Safety Center believe that these injuries and deaths could have been prevented. (VC 0367)

## Workplace Health & Safety (WHS)

### Contact Workplace Health & Safety any time

For occupational health and safety information and assistance, or to order Workplace Health & Safety publications, phone the Contact Centre at 1-866-415-8690 (415-8690 in Edmonton and area) or visit [www.whs.gov.ab.ca/expert](http://www.whs.gov.ab.ca/expert).



Sign up for  
Workplace Health  
& Safety news

To be notified by e-mail of all new Workplace Health & Safety website postings, sign up for a FREE subscription service through [www.worksafely.org](http://www.worksafely.org).

### Alberta Government Library Labour Building Site

To review the large selection of occupational health and safety information materials available through the Alberta government, go to [www.gov.ab.ca/hre/library](http://www.gov.ab.ca/hre/library).

To borrow materials, either contact your local library and make your requests through the inter-library loan system or visit the Alberta Government Library, Labour Building Site, at this address:

3rd floor, 10808 - 99 Avenue  
Edmonton AB T5K 0G5

Library phone (780) 427-8533

Audio-Visual Services phone (780) 427-4671

To reach either of the above numbers toll-free in Alberta, dial 310-0000 followed by the area code and phone number.

Fax (780) 422-0084

*Workplace Health & Safety is a division of Alberta Human Resources and Employment and falls under the jurisdiction of Minister Mike Cardinal.*





## Partnerships HEALTH + SAFETY

Partnerships in Health and Safety is a non-regulatory, province-wide injury prevention program sponsored cooperatively by government, labour and industry. The program offers:

- tools to implement a health and safety management system
- guidance in applying for a Certificate of Recognition (COR)
- potential for premium refunds from the Workers' Compensation Board-Alberta

For more information, call (780) 427-8842 (toll free 310-0000) or visit:

### New Partners in Health and Safety

Welcome to:

- Alberta Hotel and Lodging Association, Edmonton
- North American Construction Group Inc., Edmonton
- Procor Limited, Edmonton
- University of Alberta Faculty of Extension, Edmonton

Partners in Health and Safety have exemplary health and safety management systems and are recognized as leaders in their industry. Through a Memorandum of Understanding, Partners commit to taking a proactive role with the Alberta government's Workplace Health & Safety office in promoting workplace health and safety throughout Alberta. The MOU outlines the Partners' role in improving their own effective health and safety management systems and helping others improve theirs – and in promoting the concept of Partnerships.

### Partner General Meeting 2004

More than 150 people attended the Partner General Meeting in Nisku on September 22, 2004, including four of the five original members of the Partnerships team (see photo).

These special guests were honoured for their contributions to the Partnerships in Health and Safety program, which marked 15 successful years in 2004. Each of the original team members received an etched crystal globe that represents the growth of the program from Alberta to various other provinces, states and countries.

Also to mark this special occasion, the LifeQuilt (see sidebar) was brought to the meeting following its unveiling at the Alberta Legislature.

On the agenda for the day were presentations from the private and public sectors. These included sessions on violence in the workplace, the benefits of effective workplaces and the services available, the importance of sharing best practices, innovative approaches in occupational health and safety, unique safety and health challenges in the construction sector and the benefits of being a Partner. Both the attendees and the speakers made this a highly successful event.

### LifeQuilt arrives in Edmonton

A large quilt mural known as the LifeQuilt, which has been on tour around the country since last spring, arrived in Edmonton on September 21. The quilt features images of 100 young workers from across Canada who were killed on the job, as well as the names of numerous other young workers who have been seriously injured at work.

Minister of Human Resources and Employment Clint Dunford unveiled the quilt at the Alberta Legislature, and the following day it was displayed at the Partner General Meeting (see accompanying story). It then went on public display at West Edmonton Mall for several days.

The purpose of the LifeQuilt, which was created by Toronto artist Laurie Swim with the help of many community volunteers, is to honour the lives of young workers whose deaths could have been prevented, and to raise awareness of this issue by presenting the humanity behind the statistics.

For more information, go to [www.youngworkerquilt.ca](http://www.youngworkerquilt.ca).



Original Partnerships team members standing in front of the LifeQuilt. L to R: Bob Hird, Martha Beauchamp, Carol Eamer, Brian Thomas. Missing: Bill Rozel. Photo by Perry Scott

# OILPATCH

by Kerry Tremblay

## It's a matter of safety piggybacking on safety

Akita Drilling Ltd. has won a provincial safety award for the design and implementation of a blowout preventer handler, an engineering control used to protect workers from being squashed or hurt when a piece of heavy oilfield equipment known as a blowout preventer (or a BOP) is being moved. The equipment being moved is a piece of safety equipment itself.

According to Akita's Chief Operating Officer Karl Ruud, the company's goal was to develop a safer and more ergonomic way to move the blowout preventer, without compromising the business purpose or economic considerations.

"This handler," says Ruud, "gives a lot of safety without compromising practicality. Now, we move the device instead of allowing it to move us. We can pick up the blowout preventer, then move it from side to side or up and down."

The invention won't fit in a toolbox or a back pocket like some engineering controls. It weighs in at 2.2 tonnes, and it needs the weight. It's designed to move a blowout preventer that is almost six times its own size, at 16 tonnes, with the precision needed to park a cement truck on a dime in the middle of a muddy field.

According to Akita's engineering manager Lorne Thompson, the blowout preventer handler is technically easy to use, despite its size. "It just takes a couple of hours of hands-on training for one person." That cuts training time for rig workers and at the same time keeps them much safer. Thompson says the company engineers designed the giant metal lifter in about two months at the request of a client. It took a further six weeks to build.

The handler is currently being used on one drilling rig in the tar sands area of northeastern Alberta, on Akita equipment, under contract to the client. In the year it has been used, nobody on the oil rig has been hurt while moving the blowout preventer with the new handler.

It's a leap forward in technology, explains Patty Whiting, chair of Alberta's Occupational Health and Safety Council. She says the idea for a blowout preventer handler sticks out as a safe new way of looking at a significant problem in the oil and gas sector.

When the nine council members looked at and rated the different contenders for the province's first annual Awards for Innovation in Workplace Health and Safety in the spring

of 2004, this idea was a clear winner over many other good ideas, Whiting says. "It's the next phase of what we have to do to reduce injuries. Akita Drilling took the industry to the next step."

Whiting says she knows from her own industry experience running an oilfield company that even well-trained workers have lost limbs and had severe

head injuries while working with large equipment. "Those kinds of workplace injuries are major, significant injuries that affect people for the rest of their lives." Taking the worker out of harm's way while the blowout preventers are being moved will make the workplace safer. She says the spark of the idea has far-reaching implications for the workers involved and for the industry as a whole.

The change is similar to changes that have occurred in other industries over time, Ruud says. He compares the use of the handler to what has happened at car repair shops. In the old days, cars were lifted up with chains so that

**The idea for a blowout preventer handler sticks out as a safe new way of looking at a significant problem in the oil and gas sector.**

# INNOVATION

mechanics could work on the underbellies. Now, modern shops have hydraulic hoists that lift the cars safely.

Ruud says that while the hydraulics technology is not completely new, it is the first time it has been designed for use with mid-sized blowout preventers. He sees potential uses for it anywhere that similar-sized blowout preventers are required. With a few modifications and time to set it up, the handler could easily be adapted for work in places like Alberta's foothills, where holes are notoriously deep and the potential for blowouts is high.

The blowout preventer handler won the Award of Distinction for technological innovation that directly impacts health and safety in the mining and petroleum development sector.

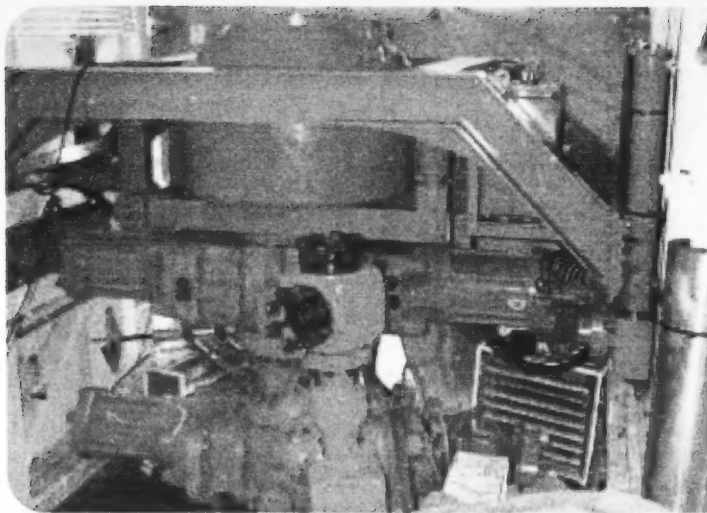
*Kerry Tremblay is a Calgary freelance writer specializing in safety and training.*

## Resources

### WEB LINKS

[www.akita-drilling.com/](http://www.akita-drilling.com/)  
Akita Drilling home page

[www.gov.ab.ca/hre/whs/ohscouncil/innovation2004.asp](http://www.gov.ab.ca/hre/whs/ohscouncil/innovation2004.asp)  
Winners of 2004 Annual Awards for Innovation in Workplace Health and Safety



Akita Drilling's "handler," a safer and more ergonomic device for moving blowout preventers.

## HOW IT WORKS

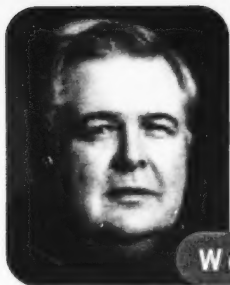
In oilfield drilling blowout preventers are safety devices designed to close in or shut down a well during emergency situations. They mechanically protect the world and workers from uncontrolled releases of potentially dangerous oil well fluids that range from deadly poisonous sour gas to environmentally damaging oil.

The trouble is, the blowout preventers can be heavy (upwards to 40 tonnes), and they have to be moved onto the wellhead for the drilling operation. They are used in virtually all well drilling, but some of the wells – either because of their depth, the anticipated downhole dangers or the width of the hole itself – need bigger blowout preventers for safety.

Akita's drillers are using the award-winning handler on giant drilling pads that are the base for numerous wells. Here, the handler can be and is used on a daily basis, moving a 16-tonne blowout preventer from well to well.

The blowout preventer handler improves the flow of work at a heavy oil well site because it eliminates the need to expose workers to the blowout preventer while it is being moved into place. Under the old system, four to six workers were needed to guide the machine, using winches, slings and pulleys to hold the weight.

The new system allows one person to control the blowout preventer move with accuracy and from a safe distance, using hydraulics. Once the blowout preventer is in place, workers can bolt it down.



## Web Watcher

by Bob Christie

# CREATIVE APPLICATIONS OF INTERNET TECHNOLOGY Serve Workers and Employers

In the September 2004 issue I highlighted the efforts of CanQual ([www.canqual.com](http://www.canqual.com)), which uses the Internet to do online contractor pre-qualification. This column describes two more companies that are providing services through the Internet to help people meet the long-standing problems of the workplace.

### RMS Remote Medical Services

The brainchild of Robert Smith, RMS Remote Medical Services was born out of Robert's frustration with a small number of personnel supply companies who try to make bigger dollars by hiring new medical and safety services people, paying them little and, in Smith's words, "abusing them for the short winter cycle and then discarding them." From the RMS website ([www.remotemedicalservice.com](http://www.remotemedicalservice.com)) it appears possible to hire a turnkey service, complete with the necessary equipment for a job and training for company personnel – or for individuals who want more or better training in the industry.

Although it's difficult to see how this works from the website itself, Smith says the idea is simple. "Candidates post a resume for free. Employers can view the resume but not the contact information. They send a Visa number, and up comes the contact information. Candidates now have options regarding who to work for. When the industry gets busy and the staff crunch of January and February arrives, employers will have to search the easiest or most immediately available spot. This is my first season, so the test is coming."

By the time this article reaches your desk, I expect the experiment to be in full flower. We'll know by then if things are working as planned.

### Rigskills

Dave Morgan's baby called Rigskills ([www.rigskills.ca](http://www.rigskills.ca)), is not, on its face, a health and safety site. But I am reminded of what a teacher once told me: "Every teacher is a teacher of English." In the same way, getting the right services or the right people for the right job has to mean doing things the right way, which also means the safe way.

In Morgan's words, "The basic objective is to provide the most accurate location and availability information about hands and equipment in Western Canada." From Abandonment Services to Wireline, Rigskills divides the listed resources into over 60 categories. You can search for an item, skill or service, or you can look at a growing list of inventory. Perhaps most intriguing is that as a subscriber you get full access, but as a typical cheapskate Web user (like me) you can get a limited listing of resources free. It is quite a neat marketing system. Suppliers who do not want to bear the burden of getting their information to potential customers can just be listed and be available only to paid-up subscribers. More proactive suppliers can pay an annual subscription fee themselves and have their listings available free.

So both sides can get something free, and they can pay to get more. This site will make you smile. So, whether you are looking for crew quarters in Abee or a backhoe in Zama Lake, give Rigskills a try.

When next we meet, I will try to decipher the website of the Canadian Association of Geophysical Contractors. Until then, happy surfing. It is hardly ever hazardous to your health or safety.

*Bob Christie is a partner at Christie Communications Ltd., a multimedia development company in Edmonton. Bob supplies most of the Web link resources for the articles in this magazine.*

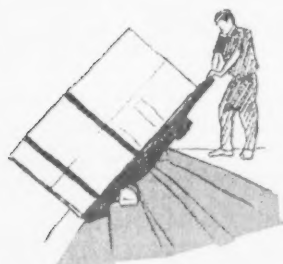


**Real World  
Solutions**

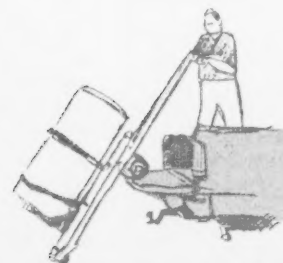
## Work-related incident fatalities February 2004 - May 2004

What improvements have you made at your workplace? If you've found a solution worth sharing, please send it to [ray.cislo@gov.ab.ca](mailto:ray.cislo@gov.ab.ca).

### MOTORIZED ELECTRIC STAIR-CLIMBING HAND TRUCKS



Going up some stairs



Loading onto the tailgate  
of a pickup truck

#### THE PROBLEM

How do you get heavy or awkward-sized loads up or down stairs, or loaded into a pickup truck?

#### A SOLUTION

Motorized electric stair-climbing hand trucks can move a load up or down stairs, onto the tailgate of a pickup truck or into a utility van without relying on multiple workers to lift and lower the load. A motor on the unit raises and lowers the load from one stair to the next.

#### BENEFIT

Eliminates the need for workers to lift and lower heavy and awkward loads on stairs.

### AN ALTERNATIVE TO ALWAYS KNEELING

#### THE PROBLEM

Some jobs or tasks require workers to kneel for long periods of time, which places stress on knees, ankles and backs.



#### A SOLUTION

Stools or portable steps may help, as might a unique kneeling product from Sweden called the "Snapsit".

#### BENEFITS

Improved working conditions result in less strain and discomfort in the knees, ankles and back.

The following information about deaths caused by work-related incidents or exposure is published to remind readers of the importance of workplace health and safety. In many cases the investigation into these fatalities is continuing. Final investigation reports are filed at the Alberta Government Library - Labour Building Site and can be reviewed there or on the Workplace Health & Safety website at [www.whs.gov.ab.ca](http://www.whs.gov.ab.ca) under Fatalities.

To protect personal privacy, the fatality descriptions do not include the names of the deceased.

Most work-related incident fatalities that fall under provincial jurisdiction are investigated by Workplace Health & Safety. In general, highway traffic, farm, disease or heart attack fatalities are not investigated.

#### The following fatalities have been or are being investigated.

A 52-year-old maintenance supervisor slid down the steps of a tool van and broke a leg. The worker returned to modified work duties the day after receiving treatment, and then within a few days underwent corrective surgery. The worker was able to perform modified work duties for approximately three weeks following the surgery, but then died in hospital as a result of complications.

A 61-year-old heavy equipment operator with 30 years of experience was crushed between the frame and blade of a caterpillar. The fatality occurred when a second operator, failing to see the worker, moved the caterpillar to hook up the blade.

A 43-year-old truck driver with more than 20 years of experience suffered fatal internal injuries when a building fell on him. The worker was helping to remove old buildings with a picker truck.

A 25-year-old lift mechanic's helper who was maintaining ski lift towers from a work chair suffered fatal head injuries when the railing of the chair contacted the lower terminal. The worker had three months of experience in this job.

A 25-year-old corrosion protection technician with two and a half years of experience was electrocuted while working on a rectifier box. The worker had not isolated the power supply and made contact with 480-volt terminals in the box.



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